

KONA Enterprise IoT Gateway

With Embedded Network and Application Server for Industrial Deployments

The KONA Enterprise IoT Gateway is very compact and lightweight, comes with integrated Cat-6 3G/4G modem and Ethernet backhaul. Embedded Network and Application Servers allow simplified deployment and direct integration with existing infrastructure using industrial interfaces such as Building Management System (ie. BacNet), Programmable Logic Controller (PLC), SCADA Systems. The LoRaWAN, 3G/4G and GPS antennas are integrated within the enclosure. For remote applications and extra flexibility it also supports optional external LoRaWAN and 3G/4G Antennas.

- Outdoor Network Coverage
- In-building Networks
- Warehouses
- Commercial Farming
- **University Campuses**
- Multi-building Complex
- Parkades
- Medium Sized Private Developments



Key Software Features

- >> Includes Embedded ChirpStack Network Server
- Enables Physical Industrial Connection over Ethernet through Modbus TCP/IP and BACNet
- >> Includes Embedded Node-Red Application Server
- Access Control Management
- Cellular Parameter Configuration
- Radio Configuration and Control
- Remote Software Upgrades
- Active and Passive Image Management
- DHCP v4 Client
- TFTP Server
- HTTP Server
- >>> Firewall and Access Lists

Key Hardware Features

- >> US915, EU868, AU915, AS923 ISM Bands
- >> Time Duplex 8 Rx / 1 Tx
- >> Integrated Cellular 3G / 4G Modem
- >>> Built-in LoRaWAN, 3G/4G & GPS Antennas
- >> Optional external LoRaWAN and 3G/4G Antennas
- >> IP67 Design
- >> IEEE 802.3af PoE or Passive PoE at 37 to 57 VDC
- >>> Pole, Wall, Tower Building DIN Rail Mounting Options





KONA Enterprise IoT Gateway

Highly Optimized Cost-Effective Gateway for Enterprise Deployments

Technical and Functional System Specifications

Mechanical Parameters

MTBF	450,000 hours
DC Power Consumption	4.5 W (Typical)
Operational Temperature	-40°C to +60°C
Operational Humidity	10% to 100% Condensing
Ingress Protection	IP67
Size	145.8 x 178.8 x 79.5 mm
Weight	1.2 kg
Volume	2.5 L

LoRa Radio Parameters

ISM Bands	US915, EU868, AU915, AS923, MA869-870
Tx Power	14 dBm to 27 dBm
Rx Sensitivity	-141 dBm (SF12, 293 bits/sec)
Rx Noise Figure	2.5 dB
Rx Linearity	-5 dBm
Rx Dynamic Range	70 dB Analog, 100+ dB Digital

Interfaces

Ethernet Backhaul	RJ-45 (10/100 BaseT)
Cellular Backhaul (3G/4G)	Internal with optional External
LoRa Antenna	N-Type
Power	802.3af PoE or Passive PoE at 37 to 57 VDC

Regulatory Compliance

Safety	UL / CSA / EN / IEC 62368-1
Regulatory	FCC: 15.247, 15.109, 15.209
	ISED: RSS - 247, RSS - Gen
	CE: RED 2014/53/EU





